

4.0 Additional Federal Land Access Issues

Additional statutory and discretionary requirements beyond lease stipulations impact Federal land access for oil and gas development. Many of these impacts were not quantified because GIS data do not exist, or they are issues that are not amenable to quantitative analysis. Many of these requirements can be considered restrictions on drilling because they have effects similar to stipulations on oil and gas development activities.

These issues can directly or indirectly impact Federal land accessibility for oil and gas development. Tables 4-1 through 4-16 present office-specific issues that were recorded from discussions with BLM and FS staff during field visits. Average APD processing time was calculated for each office using input from the offices supplemented by an analysis of BLM's Automated Fluid Minerals Support System (AFMSS).⁴⁷

4.1 Issues Directly Impacting Access

The National Environmental Policy Act of 1969. The NEPA is the nation's central environmental statute. It requires Federal agencies to consider environmental impacts before an action is taken. The NEPA process is intended to help public officials make better decisions based on an understanding of their environmental consequences.

⁴⁷ These tables include only offices that were visited or specifically contacted during EPCA Phase I, Phase II, and Phase III data collection. Not all offices responded. In addition, areas for which an extrapolation was conducted to determine land and resource access categorization (see Appendices 4 and 9) are not included in this section.

The NEPA is embedded into the fabric of Federal land management decision-making and has become the most important procedural public land management statute because it requires agencies to comply with its processes in all situations where major actions are contemplated. When an activity or action is proposed on Federal lands, an interdisciplinary review of the environmental effects of the proposal is conducted and made available to citizens and public officials. The review can take one of four forms:

- a categorical exclusion (CX)
- documentation of NEPA adequacy (DNA)
- an environmental assessment (EA)
- an environmental impact statement (EIS)

The NEPA process can impact oil and gas development in terms of cost and time delays. Typically an EIS or EA is drafted in consultation with the cooperating agencies, presented for public comment, and reviewed by multiple agencies. A simple EIS can take 24 to 36 months to complete, while those with more complex issues may require three to six years to complete. The land use planning process as a whole takes in excess of 36 months, particularly if there is oil and gas involved. The NEPA documents analyze alternatives to the proposed action and must include a "no action" alternative. Impacts are classified as direct, indirect, and cumulative, and include the evaluation of economic impacts to counties and states to be considered, as well as impacts on resources.

When considering oil and gas leasing, the BLM has identified the need to obtain

Table 4-1. Access Issues, Northern Alaska Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Fairbanks, AK BLM (Northern Field Office)	No EA: 60 days, with EA: 30 days	NE NPRA Final Integrated Activity Plan/EIS. NW NPRA Final Integrated Activity Plan/EIS.	Critical habitat not mapped, office takes conservative approach		Native coporations (subsistence resources), increased consultation required	

*Calculated based on office interviews and analysis of AFMSS data

Table 4-2. Access Issues, Southern Alaska Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Chugash NF		Revised Land and RMP for the Chugash NF, 2003	Raptors			
Tongass NF		Revised Land and RMP for the Tongass NF, 1997				

*Calculated based on office interviews and analysis of AFMSS data

Table 4-3. Access Issues, Eastern Oregon-Washington Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Deschutes NF	1-2 years	Deschutes NF Plan, 1990	Lynx, bald eagle, salmon, trout, steelhead, sage grouse		A need to keep tribes informed	
Lakeview, OR BLM		Lakeview RMP, 2003	Pygmy rabbit, sage grouse		Several tribes; back-and-forth interaction required	
Ochoco NF	1-2 years	Ochoco NF, Oil and Gas Leasing Analysis Final EIS, 1993	Lynx, bald eagle, salmon, trout, steelhead, sage grouse		A need to keep tribes informed	

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
				Modeling required for each point source		Lack of infrastructure, ice roads	Coastal Zone Management Act, wetlands, oil spill plans, litigation, all slow down process

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Culturally rich area				Issue regarding salmon habitat preservation		ANILCA can be an issue relative to environmental preservation; subsistence uses, e.g., moose hunting and fishing; budget constraints; increased tourism for "pristine environment"
	Culturally rich area				Issue regarding salmon habitat preservation		ANILCA can be an issue relative to environmental preservation; subsistence uses, e.g., moose hunting and fishing; budget constraints; increased tourism for "pristine environment"

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Large paleontological sites, cultural plants			Increasing O&G development would be problematic	Increasing O&G development would be problematic		Oil and gas skills lacking in office
							If leasing occurs, staffing would be a concern
	Large paleontological sites, cultural plants						Oil and gas skills lacking in office

Table 4-3. Access Issues, Eastern Oregon-Washington Study Area (continued)

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Prineville, OR BLM	1-2 years	John Day River Management Plan, Two Rivers, John Day, and Baker RMP, 2001; Prineville - Two Rivers RMP; Prineville - Upper Deschutes RMP; Brothers/ LaPine RMP, 1989; challenges to NEPA documents	Lynx, bald eagle, salmon, trout, steelhead, sage grouse		A need to keep tribes informed	
Spokane, WA BLM		Proposed Spokane RMP and Amended Final EIS, 1992				
Umatilla NF		Umatilla and Malheur NFs, Oil and Gas Leasing Final EIS, 1995; numerous challenges to NEPA documents	Fisheries: salmon, bull and steel trout; lynx		Significant consultation required	
Vale, OR BLM	1-2 years	Baker RMP, 1989	Lynx, bald eagle, salmon, trout, steelhead, sage grouse		A need to keep tribes informed	

*Calculated based on office interviews and analysis of AFMSS data

Table 4-4. Access Issues, Ventura Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Angeles NF		Revised Land Management Plan and Final EIS for Angeles NF, 2000	Several species in riparian habitats (stickleback toad, frog, flycatcher)			
Bakersfield, CA BLM		Caliente RMP, 1997	Condor			
Los Padres NF		Revised Land Management Plan and Final EIS for Los Padres NF, 2005	Condor, riparian species			
Palm Springs, CA BLM		South Coast RMP and ROD, 1994				

*Calculated based on office interviews and analysis of AFMSS data

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Large paleontological sites, cultural plants						Suburban encroachment issues; oil and gas skills lacking in office
					80% of streams listed as impaired		Lack of cooperation with state agencies; Oregon state restrictive for surface access on split estate; if leasing were to occur, staffing would be inadequate
	Large paleontological sites, cultural plants						Suburban encroachment issues; oil and gas skills lacking in office

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
			Open space presentation	Issue in non attainment area	Water usage issues	Traffic, unstable geology, road access is difficult due to geology and topography, high speed rail is proposed	Environmental justice, "Not In My Backyard" philosophy; if leasing were to occur, staffing would be inadequate
				Issue in non attainment area			Urban encroachment
	May require a pre-lease inventory		Off-forest development impacting recreation NSO			Age of infrastructure issues	Urban encroachment, "Not In My Backyard" philosophy; if leasing were to occur, staffing would be inadequate
							Urban interface issues, especially Santa Clarita

Table 4-5. Access Issues, Eastern Great Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Arizona Strip, AZ BLM		Arizona Strip DO RMP / EIS, 1992	Desert tortoise			
Battle Mountain, NV BLM		Egan RMP Approved Oil and Gas Leasing Amendment and ROD, 1994; Tonopah RMP and ROD, 1997	Sage grouse, pygmy rabbits, trout, raptors		Tribes generally participate in consultation	
Burley, ID BLM		Cassia RMP, 1985; Monument RMP, 1986; challenges to NEPA documents are frequent	River snails			
Elko, NV BLM		Elko RMP and List of Stipulations, 1987; Wells ROD and List of Stipulations, 1985	Fisheries, bull trout, bats, pygmy rabbit, raptors		Shoshoni tribe prefers no development	
Ely, NV BLM		Egan RMP Approved Oil and Gas Leasing Amendment and ROD, 1994	Desert tortoise, sage grouse, pygmy rabbit (habitat not mapped), migratory birds			
Fillmore, UT BLM		House Springs Resource Area RMP and ROD Rangeland Program Summary, 1987; Warm Springs Resource Area RMP and Rangeland Program Summary, 1987	Critical big game habitat			
Idaho Falls, ID BLM		Big Desert Management Plan, 1981				
Las Vegas, NV BLM		Las Vegas RMP and Final EIS, 1998			Concern with some tribes	
Pocatello, ID BLM		Pocatello and Medicine Lodge Resource Areas RMP, 1988	Grey wolf, bald eagle, Snake River snails, Ute's lady's truss			
Salt Lake City, UT BLM		Bear River EA, 1994; ROD and Rangeland Program Summary for the Box Elder RMP, 1986; ROD for the Pony Express RMP and Rangeland Program Summary for Utah County, 1990				

*Calculated based on office interviews and analysis of AFMSS data

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Numerous cultural sites and trails - Spanish Trail, Mormon Trail						If leasing were to occur, staffing would be inadequate
	Issue may arise with older surveys						If more leasing were to occur, staffing would be inadequate
	Historic trails and ACECs exist	Potential conflicts with decorative stone mining in the Middle Mountain Area	Class I viewsheds			Access to FS lands via private lands	"Not In My Backyard" philosophy in Albion Valley; If leasing were to occur, staffing would be inadequate
	Not many sites are greater than the EDZ buffer; Pine Valley Narrow Gauge Railway		Issues with I-80 corridor				Issues with split estate in unincorporated areas; staffing adequate at present; citizens' general distrust of Federal government
	Numerous cultural sites						Suburban encroachment; local handling of APDs would shorten processing time; if leasing were to occur, staffing would be inadequate
							Cumulative analysis shows that drilling >6 wells per year would require an amendment
					Sediment and nutrient loading issues		If leasing were to occur, staffing would be inadequate
		Tar sands					Recreation conflicts if O&G development occurs; Authorization Bill of 2000 hinders land use planning

Table 4-6. Access Issues, Paradox Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Cedar City, UT BLM		Cedar Beaver Garfield Antimony RMP, 1986	Raptors			
Kanab, UT BLM	6 to 12 months	Escalante MFP, 1981; Henry Mtn., Parker Mtn., and Mtn. Valley MFP, 1982; Paria MFP, 1981; Vermillion MFP, 1981; Zion MFP, 1981	Raptors, bald eagle, Mexican spotted owl, flycatcher			
Manti-La Sal NF	1 year	Land and RMP – Manti-La Sal NF, 1986. New plan to be released in December 2006; virtually all NEPA documents are challenged	Goshawks, raptors, Mexican spotted owl, sensitive plants			
Moab, UT BLM	Average 6 months, note deficient APDs from companies	Lopez Project, Utah State BLM Statewide Stipulations, Book Cliffs RMP, 1985	Mexican spotted owl, raptors, pedio, despainii and winklerii cacti			
Monticello, UT BLM	60 days	Lopez Project, Utah State BLM Statewide Stipulations	Mexican spotted owl, raptors		McCraken Extension (50,000 acres) is split estate with Navajo lands (3 or 4 APDs per year); Navajo wants to reclaim mineral rights	
Montrose, CO BLM (Uncompahgre Field Office)	30 to 60 days	San Juan/San Miguel RMP Amendment, October 1991. New plan to be released in December 2006				
Price, UT BLM	8 months	Lopez Project, Utah State BLM Statewide Stipulations. Price RMP in draft.	Despainii and winklerii cacti, raptors			
Richfield, UT BLM	30 days or less	Lopez Project, Utah State BLM Statewide Stipulations				
St. George, UT BLM		St. George FO – ROD and RMP, 1999. No site specific NEPA coverage	Mexican spotted owl, southwestern willow flycatcher, Desert tortoise		MOUs with Southern Piute and Hopis; Southern Piute generally not supportive of O&G activities	
Salt Lake City, UT BLM		Bear River EA, 1994; ROD and Rangeland Program Summary for the Box Elder RMP, 1986; ROD for the Pony Express RMP and Rangeland Program Summary for Utah County, 1990				

*Calculated based on office interviews and analysis of AFMSS data

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Cultural resource concerns on any area, but "can be mitigated"		Secondary issue				Steep slope issues; if leasing were to occur, staffing would be inadequate
			Issues associated with Bryce and Zion NPs		Water disposal may be a problem in Navajo Sandstone		
		Conflict with deep gas vs. coal	Retention and preservation areas near NPs (e.g., Arches, Canyonlands)			Roads used for nonsummer months require 8 inches of gravel	There exists a potential for land exchange with state such that these areas would not be leased; however, these areas have not been demarcated; need for hydrology and other specialists
			Can be an issue in larger field developments. RMP treats VR as an inventory process as opposed to management objective. Gas flaring would be an issue			Big flat areas-well spacing maximized and at capacity; in order for further field developments an EIS would be required.	Anticipate increased NSO due to wilderness recreation and wildlife concerns. Recreational conflicts vs APDs/geophysical surveys/oil & gas development
	High density of cultural sites, cost issue for industry but does not prohibit activity		Similar to Moab office				It would be advantageous for companies to be educated in NEPA and APD requirements
					Concerned with surface water depletion		
			Last Chance field near Capital Reef NP				
	Old Spanish Trail, Mormon Trail; an estimated 12,000 cultural sites in Washington County		Zion National Park proximity	Zion National Park proximity	In process of assessing Clean Water Act amendment; Virgin and Colorado Rivers - salinization requirements, highly erodible soils		Urbanization, rural development on Split Estate; if leasing were to occur, staffing would be inadequate
		Tar sands					Recreation conflicts if O&G development occurs; Authorization Bill of 2000 hinders land use planning

Table 4-7. Access Issues, San Juan Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Albuquerque, NM BLM (Rio Puerco Field Office)	60 days	Rio Puerco RMP, 1992. Updated in 2001			30 days for tribes to comment	
Carson NF	6 months	Carson NF Plan, 1986	Mexican spotted owls, goshawks, bald eagles		Potential issue, esp. Gobernador	
Cibola NF		Cibola NF Plan, 1985	Mexican spotted owls, goshawks, bald eagles		Pueblo and Navajo Nation–sacred Mt. Taylor	
Durango, CO BLM (San Juan Field Office)	3 months	San Juan/San Miguel RMP Amendment, October 1991. New plan to be released in 2007	Sage grouse, flycatcher, ferruginous hawk, bald eagle			
Farmington, NM BLM	60-180 days	Farmington Oil and Gas Leasing Amendment, 1991. Farmington RMP completed 01/2005	Bald eagle, Nolton's cactus, designated Mexican spotted owl habitat, razorback sucker		Split estate with Navajo surface requires 6 months to a year	
Grand Mesa/Uncompahgre/Gunnison NF	25 months	GMUG - Oil and Gas Leasing File EIS ROD, April 1993	Lynx	NLA		
San Juan NF	6 months	New plan to be released in December 2006	Willow flycatcher, Mexican spotted owl, Canada lynx			
Santa Fe NF		1987 Forest Plan, amended 1996	Mexican spotted owls, bald eagles		High density of cultural resources	
St. George, UT BLM		St. George FO – ROD and RMP, 1999. No site specific NEPA coverage	Mexican spotted owl, southwestern willow flycatcher, Desert tortoise		MOUs with Southern Piute and Hopis; Southern Piute generally not supportive of O&G activities	
Salt Lake City, UT BLM		Bear River EA, 1994; ROD and Rangeland Program Summary for the Box Elder RMP, 1986; ROD for the Pony Express RMP and Rangeland Program Summary for Utah County, 1990				

*Calculated based on office interviews and analysis of AFMSS data

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Lindrieth Area-split estate with high density of cultural resources				Impaired watershed (Rio Puerco) not an issue yet but could develop; sediment loading issue		
	Navajo—high density of cultural resources			Centralized compression	Sediment loading, produced water	Road density	Differing motivation (Fed. vs. state) for approval of well spacing (revenue issue for NM); compliance issues
	High density archeological sites			Compressors	Sediment loading		Law suit in Zuni River watershed
	Archeological sites, esp. Canyons of the Ancients (existing leases)				EIS in progress; moderate but increasing concern with surface water depletion and its effects on species	Conflicts due to increased infrastructure (public use vs. industry), esp. near Durango	
	High density of cultural resources	Conflict with underground mines and CBM (oil & gas rights are senior), BLM continues to issue APDs but only in center of long wall panels		Additional compression (public concern)	Endangered fish, consultation with Army Corps of Engineers	Centralized compression (noise concerns)	
	High density of cultural resources			Issues related to proximity to Durango	Residential concern about methane contamination	Public concerns about O&G development in general	Do not have forest-wide stipulations
	High density of resources impacts road building		VR concerns make siting more difficult, esp. roads		Sediment loading from road construction	Aging infrastructure	Reclamation compliance and inspection
	Old Spanish Trail, Mormon Trail; an estimated 12,000 cultural sites in Washington County		Zion National Park proximity	Zion National Park proximity	In process of assessing Clean Water Act amendment; Virgin and Colorado Rivers - salinization requirements, highly erodible soils		Urbanization, rural development on Split Estate; if leasing were to occur, staffing would be inadequate
		Tar sands					Recreation conflicts if O&G development occurs; Authorization Bill of 2000 hinders land use planning

Table 4-8. Access Issues, Montana Thrust Belt Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Beaverhead-Deerlodge NF		1996 Beaverhead Oil and Gas EIS, 1987 FP under revision	Lynx, sage grouse		Nez Pierce Trail	
Butte and Lewistown, MT BLM		1984 Headwaters RMP (under revision), 1981 Butte District Oil & Gas environmental assessment	Grizzly bears, grey wolf, Canada lynx, reptiles, plants, raptors, fish (spawning streams, trout)	Lease sale protest decision, 1989 impacts leasing	Old North trail (historical indian migration route but with no distinct area defined)	
Dillon, MT BLM		Dillon RMP, 2006	Cutthroat trout, sage grouse, lynx, wolf reintroduction, bald eagles		Spiritual sites	
Gallatin NF		1987 Forest Plan scheduled for 2009 revision	Lynx			
Helena NF	1 year	Helena NF Plan and ROD, 1986	Lynx, bear		"Sense of Place", religious sites, historical sites; tribes getting more active in Dry Range and Big Belt areas	
Kootenai, Bitterroot, Flathead, and Lolo NFs		Kootenai—FP revision to be completed winter 2006/2007, Bitterroot—1987 FP, under revision, Flathead-FP under revision, Lolo—1987 FP, under revision	Bull trout, grizzly bear, lynx, wolf reintroduction		Spiritual sites	
Lewis and Clark NF (east)		1996 FP, 1997 Oil and Gas Leasing Decision	Lynx	NSO		
Lewis and Clark NF (west)		1996 FP, 1997 Oil and Gas Leasing Decision	Lynx	NSO	Leases suspended due to tribal consultation	
Missoula, MT BLM		Garnett RMP, 1986	Lynx, bull trout, grizzly bear habitat, wolf reintroduction, bald eagle, cutthroat trout			

*Calculated based on office interviews and analysis of AFMSS data

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Lewis & Clarke Trail, Continental Divide Scenic Trail		Concerns near west side of Big Hole Valley		Sediment loading in streams	Potential concerns if development occurs in Big Hole	
	"Sense of Place" (areas of spiritual interest to native tribes)			Sour gas production		Sour gas (only one sweetening plant), individual developments would require sweetening plants	Litigation appeals; recreation vs. wild land, infrastructure vs. vacation homes (Butte)
	Trails		Concerns near Big Hole Battlefield		Sediment loading, esp. near steep slope areas		Private access on large ranches to public lands
							Gallatin community vehemently against development
	High density of cultural resources: prehistoric and historic, modern cultural resources (homesteads, mining, etc.)				Cumulative impacts for sediment loading in streams (sensitive fish, total solids in streams)		Burned areas that will need stabilization for 3 to 6 years, such that potential for high levels of restriction; geographic constraints on concurrent activity
	Trails (Bitterroot)				Sediment loading, esp. near steep slope areas	Flathead-FP Amendment for Grizzly Bear Habitat: 1 mile of road per square mile (limits new road construction, reclaims existing roads); road timing restrictions on roads (open only in summer)	Lolo and Flathead-900,000 acres of lease in suspension, FP 20 years out of date
							Plan calls for 4 wells per year
	Traditional cultural district (10,000 acres) that impacts current lease suspension					H2S removal and facility location	
	Historical mining sites and historical trails			Cumulative impacts, especially during winter; competition for discharge capacity	Sediment loading in streams	Roads and pipelines would be problematic because of local opposition and steep slopes	

Table 4-9. Access Issues, Williston Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Malta, MT BLM		Valley MFP, 1978	Sage grouse			
North Dakota BLM		North Dakota RMP, 1988	Sage grouse, raptor		Three Affiliated Tribes, Standing Rock Sioux; numerous protests, less protests if tribe is consulted	
North Dakota Prairie Grasslands		Dakota Prairie Grasslands Northern Region Land and RMP FEIS/ROD, 2002		Leasing occurs		

*Calculated based on office interviews and analysis of AFMSS data

Table 4-10. Access Issues, Powder River Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Belle Fourche, SD BLM (South Dakota Field Office)		1986 South Dakota RMP, 1994 Miles City Oil and Gas Amendment, Miles City RMP draft is to be released in 2007	Raptors, grouse		Three Affiliated Tribes, Cheyenne River Sioux; numerous protests, less protests if tribe is consulted	
Black Hills NF		Black Hills NF 1997 Land and RMP Phase II Amendment				
Buffalo, WY BLM	Conventional wells—35 days/APD, CBNG (32 well permits)—60 days/APD, APDs are sometimes information deficient	Buffalo RMP 2005	Big game, sage grouse, sharp-tailed grouse		Developing routine consultation program as part of EIS, TCs can create problems in lag times common near drainages	

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Cultural and Paleontological sites may exist, requiring road relocation					Water hauling/ truck traffic, noise compressors	Staffing adequacy is marginal
			Custer Trail; Little Missouri River			Noise mufflers	Reluctance to grant access on split estate lands; "Not In My Backyard" philosophy
			Custer Trail; Little Missouri River	Proximity to Theodore Roosevelt National Park			

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	High density areas in northern edge of South Dakota portion of study area;					Most wells drilled 1980 or before, such that continual break downs of infrastructure has closed down wells/ production	
	Often Inadequate initial site investigation by companies	16 operating coal mines, but BLM addressing the issue adequately	Bozeman Trail-view shed preservation consideration	No. of vehicles results in increased road dust	In western and northern portions, sodium absorption ratios are a concern for produced water, coal aquifer being affected by drawdown.	Power requirement for submersible pumps will require small power plants that would result in surface disturbance, power line density increases and compressor noise, esp. around Gillette, increased compression	Split estate underlies over half of resources managed in the basin, requiring negotiations with surface owners, increased power lines result in increased raptor predation of sage grouse, prairie dogs, and mountain plover and raptor electrocution

Table 4-10. Access Issues, Powder River Basin Study Area (continued)

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Casper, WY BLM	60 days/APD	Casper RMP is currently being updated and is scheduled to be completed by 2008	Mountain plover (issue with seismic), bald eagle, golden eagle, greater sage grouse and black-tailed prairie dog (currently sensitive but potential of listing would make it an issue)		Problematic with seismic surveying	
Custer NF		Custer LRMP 1987, Sioux Ranger District O&G EIS 2005.			High density archeological sites, tribal sacred sites	
Miles City, MT BLM	3 months/APD	Powder River Amendments to the Powder River RMP was completed in 01/2005. Powder River RMP will be amended by the Miles City RMP, which draft is to be released in 2007	Bald eagle, mountain plover, black footed ferret (potential), prairie dog, sage grouse		Off-reservation cultural values and historical issues; Northern Cheyenne more conservative; Crow more open to development	
Newcastle, WY BLM	30-45 days	Newcastle RMP 2000				
Ogjala NG, Buffalo Gap NG		Nebraska NF Revised Land and RMP, 2002	Habitat preservation is a concern			
Thunder Basin NG	12 months/ APD	Thunder Basin Nat. Grassland Land and RMP, 2002	Black footed ferret reintroduction, sage grouse, mountain plover			

*Calculated based on office interviews and analysis of AFMSS data

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Similar to Buffalo, religious concerns	In situ uranium development vs. shallow coal-flooding uranium sediments but taking water out of coal will result in need to monitor "hot" water production. DOE to take over remediation of mile tailings 2005-2008	Trails often result in conflicts with linear facilities that bisect (pipelines, roads, etc.), esp. for the Mormon Trail	No. of vehicles results in increased road dust, increased amount of compression		Right of way corridors at capacity	Anticipate NSO stipulations in the future due to erodable soils
					CBNG water discharge potential issue		
	Current approach to cultural resources is considered inadequate, "block surveys" preferred; Paleontological sites are a concern	Active coal mines near WY border (potential issue)	Remaining free stands, view sheds for Tongue, Rosebud and Rosebud rivers; major roads and Tongue River (potential issue)	Cumulative impacts from activities in WY as well as MT leading to limited discharge capacity; Northern Cheyenne is Class I air shed	CBNG ground and surface water impacts (cumulative) to be addressed in new EIS; WY uses 80% of allowable discharge capacity meaning only 20% left for MT; to the NW water quality decreases; water quality effects on ranching	Locating infrastructure on agricultural lands associated with split estate is problematic	Socioeconomic-increased activity in remote areas puts ranching way of life at odds with O&G development, esp. with regard to water issues, visual intrusion, wildlife issues (migratory birds and raptor electrocution)
	High density of cultural resources (potential issue); dinosaur fossils in Niobrara County			Receptor area relative to coal development, which may limit further development O&G or otherwise			Much split estate, litigation common
	Could become an issue if development were to increase		Open grasslands often require view mitigations				
	Moderate to high vertebrate/paleo resources ("block surveys" used to assess CBM), such that all of Thunder Basin is CSU	Substantial CBM/coal mining conflicts		Increased road dust; increased amount of compression		Aging infrastructure. Road Analysis Process (RAP), above/below ground power lines is safety issue near coal mines	

Table 4-11. Access Issues, Wyoming Thrust Belt Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Bridger-Teton NF	180 days	Bridger-Teton NF Land and RMP, 1990	Pygmy rabbit, white tailed prairie dog, lynx			
Caribou-Targhee NF	120 days	Targhee NF Revised Forest Plan, 2000	Lynx, cutthroat trout, grizzly bear, wolves, sage grouse	NSO	Ancestral area, Ft. Hill Reservation, ancestral rights to land and resources	
Idaho Falls, ID BLM (Upper Snake Field Office)	120 days	Pocatello & Medicine Lodge Resource Areas RMP, 1988	Lynx, cutthroat trout, grizzly bear, wolves, sage grouse			
Kemmerer, WY BLM	3 months	Kemmerer RMP/ROD, 1986	Pygmy rabbit, white tailed prairie dog, lynx		Tribes hesitant to state all concerns. Regional issues beyond site specific, are important.	
Pinedale, WY BLM	3 months	Pinedale RMP, amended 2000 for oil & gas. New plan to be released 2007				
Pocatello, ID BLM	90 days	Pocatello & Medicine Lodge Resource Areas RMP, 1988	Lynx, cutthroat trout, grizzly bear, wolves, sage grouse, bald eagles, snails, Ute Ladies' Tress		Ancestral area, Ft. Hill Reservation, ancestral rights to land and resources	
Salt Lake, UT BLM	6 months	Lopez Project, Utah State BLM Statewide Stipulations, Isotract MFP, Randolph MFP, 1985	Sage grouse, lynx, pygmy rabbit, raptors			
Wasatch-Cache NF	1 year	Wasatch-Cache NF, Revised Forest Plan, 2003	Lynx			

*Calculated based on office interviews and analysis of AFMSS data

Table 4-12. Access Issues, Southwestern Wyoming Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Craig, CO BLM (Little Snake Field Office)	45 days	Little Snake RMP Oil and Gas Revision 1991, new plan release in 2008	White tailed prairie dog, pygmy rabbit, sage grouse are all candidate species with potential to severely impact O&G development			

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Congressionally designated trails and cutoffs, concerns protecting viewshed (measured in miles)			Limits due to air quality in Class I areas, currently close to thresholds			
	Congressionally designated trails and cutoffs, concerns protecting viewshed (measured in miles)			An issue in SW Wyoming, compression is creating air quality problems	Change in size requirements from 5 acres to 1 acre for storm water discharge		Potential conflict with wind energy (cumulative effects and infrastructure conflicts)
							No Federal land in Wyoming Thrust Belt study area
	Lack of cultural resource inventory				Sediment and nutrient loading in streams		

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
						Largely a "wildcat" region, there is no infrastructure to transport O&G out of area	

Table 4-12. Access Issues, Southwestern Wyoming Study Area (continued)

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Kremmling, CO BLM	28 days	Kremmling RMP, 1984. Revision planned for 2009	Sage Grouse		Tribes don't respond, O&G companies don't understand mandatory 30 day waiting period	
Medicine Bow-Routt NF	1 year	Medicine Bow LRMP, 2003. Routt LRMP, 1998. Thunder Basin LRMP, 2002.		Misnomer which causes conflicts with environmentalists		
Rawlins, WY BLM	6 months	Lease Stipulations, Rawlins BLM, 2001. New plan under revision			Affects timeliness	
Rock Springs, WY BLM	90 days	Green River RMP, 1997			Contact and scheduling of tribal representatives often precludes 30 day permitting goal. Need to define operator/ agency responsibility for tribal representative compensation.	

*Calculated based on office interviews and analysis of AFMSS data

Table 4-13. Access Issues, Denver Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Arapaho-Roosevelt NF	5 months	Arapaho-Roosevelt NFs, Pawnee NG Revision of the Land and Resource Management Plan, 1997				
Black Hills NF	1.5 years	Black Hills NF Plan of Land and RMP, 1997			Required for all lands	
Cañon City, CO BLM (Royal Gorge Field Office)	6 months	Royal Gorge RMP and NE Royal Gorge RMP, 1991				

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	O&G companies don't return complete survey with APD				Erosion and siltation issues	No pipelines, railway pulled out	
				Coal mines, O&G transport, trucks, contribute to air quality issues			
	Trails are registered with NHPA, defined by rutting (which can be difficult to identify)		Looming issue, Fort Laramie, Pony Express, Oregon Trail				
	30 day comment period for SHPO precludes meeting 30 day permitting goal. Need definitive guidance on visual impact distances and alternative mitigation regarding Historic Trails.						

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Could cause activities to be limited		Could require mitigation or surface limitations	Potential issue near Rapid City	Riparian areas	Inadequate road system	

Table 4-13. Access Issues, Denver Basin Study Area (continued)

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Casper, WY BLM	50 days	Casper RMP, 2001. Wyoming BLM Mitigation Guidelines for Surface-disturbing and Disruptive Activities				
Nebraska NF	60 days	Nebraska NF Revised Land and RMP FEIS/ROD, 2002				
Newcastle, WY BLM	30-45 days	Newcastle FO, ROD & Approved RMP, 2000				
Pike-San Isabel NF		Pike & San Isabel NF, Cimarron & Comanche NG RMP				
Rawlins, WY BLM	6 months	Lease Stipulations, Rawlins BLM, 2001. New plan to be released late 2006			Affects timeliness	

*Calculated based on office interviews and analysis of AFMSS data

Table 4-14. Access Issues, Florida Peninsula Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Big Cypress National Preserve		Big Cypress General Management Plan/ Final EIS, 1991	Florida panther, west Indian manatee, cape sable seaside sparrow, bald eagle, wood stork, red-cockaded woodpecker, snail kite, arctic peregrine falcon, American alligator, eastern indigo snake, Everglades mink, mangrove fox squirrel, Florida black bear, bachman's sparrow, swainson's hawk, reddish egret, swallow-tailed kite, southeastern kestrel, migrant loggerhead shrike, mangrove clapper rail			

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
	Trails are registered with NHPA, defined by rutting (which can be difficult to identify)		Looming issue, Fort Laramie, Pony Express, Oregon Trail			Surface owner/ split estate surface access for roads and pipelines, urbanization conflict	
	Often locations must be modified				Easily erodable soils	Easily erodable soils	
	Trails are registered with NHPA, defined by rutting (which can be difficult to identify)		Looming issue, Fort Laramie, Pony Express, Oregon Trail			Surface owner/ split estate surface access for roads and pipelines, urbanization conflict	
			Recreation view sheds	Potential problem, incremental loading from O&G activity	Sedimentation concerns	Urban interface concerns, public concern about drilling, trucks	
	Trails are registered with NHPA, defined by rutting (which can be difficult to identify)		Looming issue, Fort Laramie, Pony Express, Oregon Trail				

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
							Office not visited

Table 4-14. Access Issues, Florida Peninsula Study Area (continued)

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Fish and Wildlife Service in Florida						
Jackson, MS BLM		Florida RMP/ROD, 1995	Red-cockaded woodpecker			

*Calculated based on office interviews and analysis of AFMSS data

Table 4-15. Access Issues, Black Warrior Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
National Forests in Alabama	6 months	Alabama NFs – Revised Land and RMP, 2004. APD requires project-level NEPA of 3-6 months	Gopher tortoise, red cockaded woodpecker			
Jackson, MS BLM	5 months	Assorted Leases	Red-cockaded woodpecker			
National Forests in Mississippi	2 months	Mississippi EA report – O&G leasing on the NF's, 1976. Done at APD stage. New plan to be released in 2007				

*Calculated based on office interviews and analysis of AFMSS data

Table 4-16. Access Issues, Appalachian Basin Study Area

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Allegheny NF	1 year	Allegheny NF Land and RMP, 1986. New plan to be released early 2007	Bald eagle, Canada lynx, Indiana bat		Need for consultation	
Daniel Boone NF	8-9 months (90 days for an APD on split estate lands)	Daniel Boone NF Revised Land and RMP, 2004	Black sided dace, mussels (several varieties), Indiana bat, primarily aquatic species		Some consultation on historic Cherokee lands	
Finger Lakes NF		Finger Lakes NF O&G Leasing ROD 2001. New plan to be released 2006	Bald eagle, Canada lynx, Indiana bat			
George Washington NF	1 year	George Washington NF – Final revised Land and RMP, 1993	Indiana bat, aquatic species	CSU		
Jackson, MS BLM		Assorted Leases	Red-cockaded woodpecker			

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
							Office not visited

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
							Office not visited

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
				Becoming an issue, coal plants, O&G activity near cities	State-listed impaired streams, sedimentation concerns		
						Forest benefits from energy infrastructure, good maintenance	

Table 4-16. Access Issues, Appalachian Basin Study Area (continued)

Jurisdiction	Issue or Characteristic Noted by Office					
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Jefferson NF	1 year	Jefferson NF – Revised Land and RMP, 2004	Indiana bat, aquatic species			
Milwaukee, WI BLM	5 months for COE and Federal minerals (split estate)	No RMPs to cover non-FS lands, develop NEPA on project-by-project basis	Indiana bat, running buffalo clover, bald eagle		Consultations done on ceded territories at the APD stage, often too late (consultations primarily needed in PA and NY)	
Monongahela NF	2 months	Monongahela NF Land and RMP, 2006	Bald eagle, Canada lynx, Indiana bat			
Wayne NF	1 year	Wayne NF Land and RMP, 2006	Bald eagle, Canada lynx, Indiana bat			

*Calculated based on office interviews and analysis of AFMSS data

additional data on such issues as air quality and clean water as a part of the cumulative impact analysis required by the NEPA and land use planning processes. This has been cited as an overarching issue that affects oil and gas lease parcel nominations. This lack of data can result in leasing delays when existing documents are deemed inadequate. The net result is that potential applicants are often aware of the problem and make decisions not to develop in areas that will be or could be held up by the NEPA process.

With respect to the NEPA process itself, concern was expressed by some government officials that individual documents provide “piecemeal” information and that better environmental decisions could be made based on larger scale studies that look at the “bigger picture.” For example, wildlife habitat fragmentation is better characterized when it is examined in the context of larger rather than smaller areas.

Delays can increase costs for oil and gas operations because, rather than waiting for the Federal agency to complete the work, operators frequently pay a third-party contractor to perform the necessary work.

Section 366 of Energy Policy Act of 2005 (EPAct 2005) sets a deadline for the consideration of applications for permits. The permit must be issued within 30 days (if NEPA and other legal requirements have been met), or defer the decision and provide a notice to the applicant.

The Endangered Species Act of 1973.

The ESA requires Federal agencies to conserve listed species. Under the ESA, species are treated as either listed, proposed, or candidate species. In BLM and FS jurisdictions, listed and proposed species are treated similarly. Candidate species are generally handled in a discretionary manner. All BLM administrative offices treat sensitive species as defined by the BLM and

	National Historic Preservation Act	O&G vs Coal and other Mineral Development	Visual Resources	Air Quality	Clean Water	Infrastructure Concerns	Others
						Forest benefits from energy infrastructure, good maintenance	
	Need agreements with state historical presentation offices (SHPOs), need state protocols, opportunity for streamlining	Minor in PA					COE & NY state cooperation is limited, Fed. leases in PA are being drained losing \$50 million/year royalty revenue, for most minerals Fed. have < 100% ownership (and often far less), BLM stipulations are developed on an ad hoc basis

state governments the same as endangered species.

Federal agencies are responsible for managing wildlife habitat, while state governments manage the wildlife itself. In many areas habitat has not yet been mapped. If habitat information is required before leasing and permitting then additional delays are possible. Habitat for candidate species has been generally withheld from oil and gas leasing by Federal agencies during a consideration period of up to 2½ years.

Inventoried Roadless Areas. A total of over 18 million acres of National Forest Inventoried Roadless Areas (IRAs) exists within the boundaries of the Inventory’s study areas. The FS representatives recognize the complexity surrounding the issue of IRAs. In July 2004, the FS published a proposed rule to revise the Roadless Area Conservation Rule published in January 2001, which was reversed in July

2003 by the Federal District Court for the District of Wyoming.

The final roadless rule was published in May 2005. The rule allows governors to petition the Secretary of Agriculture to develop regulations to manage roadless areas in order to meet specific needs within each state. The FS was to accept state petitions from governors for 18 months after the effective date of the final rule. In January 2006, the interim ruling from July 2004 was extended for another 18 months.⁴⁸ During the state-petitioning process, the FS will continue to maintain interim measures to conserve inventoried roadless areas.

Despite the controversy surrounding the issue, leasing does occur in a limited number of roadless areas. In such cases, leases are

⁴⁸ USDA-Forest Service Interim Directive #1920-2006-1. http://www.fs.fed.us/im/directives/fsm/1900/id_1920-2006-1.doc

issued with the caveat to industry that the disposition of roadless areas is unresolved and that the areas under lease may have to remain roadless.

Visual Impacts. Concern over visual impacts is affecting oil and gas development in some areas. For example, field developments can be delayed until impacts and other issues are assessed. Visual impacts were raised as a potential issue by many BLM and FS offices.

Suburban Encroachment. Opposition to oil and gas activities is increasing as residential construction spreads into previously undeveloped areas. This has not been a significant issue until recently and has not generally been incorporated into oil and gas planning activities. Some offices are considering NSO stipulations to maintain open space near housing developments.

Seasonal Restrictions in Alaska. The primary constraint to access in the National Petroleum Reserve-Alaska is the restriction that limits exploratory drilling activities to the winter season, which lasts approximately 5 months. During that time, ice roads need to be built, a task that can take one or 2 months and may be limited to 25-30 miles due to technology and weather. Coupled with timing limitations for threatened and endangered species, the cumulative effects of these limitations make drilling operations difficult and may significantly impact project economics.

4.2 Issues Indirectly Impacting Access

Clean Water. In the UPB, the issue of clean water has been raised in the context of the need for examining entire watersheds rather than just the local area.

It is increasingly recognized that an entire watershed (rather than administrative jurisdictions) must be examined in instances where activity within one jurisdiction may affect another downstream. Often in the western U.S., states and counties object to drilling in municipal watersheds, often resulting in added stipulations and/or conditions of approval for protection. In addition, localized clean water issues include mitigating increased selenium concentrations, salinity, and sedimentation.

Air Quality. Air quality can be a contentious issue in Rocky Mountain basins, such as the SWW. Increasingly, air quality issues are being raised as a concern, especially in Utah.

Staffing. Workload requirements are increasing and the BLM is facing challenges with respect to the timely processing of APDs, energy-related rights of ways, and monitoring compliance. The number of APDs received has increased significantly. Recruitment and retention of professional oil and gas staff is challenging, in part because of competition with industry for qualified personnel. Other specialties, such as archeology, biology, and environmental protection are severely understaffed in some areas and have high turnover rates as well. These positions are needed for coordinating required clearances (e.g., ESA, NHPA) and participating on interdisciplinary teams. Inadequate staffing can create bottlenecks and high turnover often necessitates retraining new hires to perform the unique and complex tasks associated with the oil and gas program.

Section 365 of EPLA 2005 requires the Secretary of the Interior to establish a Federal Permit Streamlining Pilot Project to improve Federal oil and gas permit

coordination. The Department of the Interior, Department of Agriculture, Environmental Protection Agency, and the Army Corps of Engineers signed a Memorandum of Understanding establishing staffing needs and funding protocols for the pilot offices on October 25, 2005. The seven pilot offices (Rawlins and Buffalo, Wyoming; Miles City, Montana; Farmington and Carlsbad, New Mexico; Grand Junction/Glenwood Springs, Colorado; and Vernal, Utah) have been created.

In 2006, the BLM pilot offices processed more permits, and lowered their average turnaround time for individual permits. In the Farmington field office for example, the total number of permits processed increased from 817 in 2005 to 993 in 2006.

Native American Consultation. The large number of APDs and leases impacts the timeliness of completing the consultation requirements of the NHPA. Consultation with Tribes is increasing and can extend the time required to obtain leases and drilling permits.

Conflicts between Mineral and Coalbed Natural Gas (CBNG) Developers. In the PRB, conflicts can occur between coal mining operators and coalbed natural gas producers. It is BLM policy to encourage oil and gas and coal companies to resolve conflicts between themselves. When requested, the BLM will assist in facilitating agreements between the companies. The BLM will also exercise authority provided in the leases, applicable statutes, and regulations to manage Federal mineral development in the public's best interest.

Infrastructure. The physical infrastructure to support oil and gas development and production is often strained. Existing

pipelines may be at capacity and new pipeline construction is often a lengthy process. County roads are typically not designed for the volume of truck traffic that they can experience during oil and gas field development. Infrastructure issues can act to constrain future marketing capacity, although new pipeline construction can relieve this bottleneck.

The BLM's energy-related rights-of-way processing workload has increased along with the increase in APDs. These authorizations are required for such infrastructure as pipelines, roads, and power lines that are located outside of a lease or unit boundary.

Snow Delays. In the higher elevation areas of the Rocky Mountains, snow depths can be so great as to preclude drilling even if there are no winter drilling stipulations. This situation potentially makes for a short drilling window, especially if there are timing limitations during non-snow months.

Industry Understanding of the Leasing and Permitting Process. There is often less-than-optimal understanding and planning within some companies with respect to these processes. The BLM encourages oil and gas operators to inform and work with the permitting agencies as early in the planned development process as possible. The issuance of the recently updated *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* (the "Gold Book," 4th edition, 2006, available at <http://www.blm.gov/bmp/goldbook.htm>) should enhance operators' understanding and expectations.

